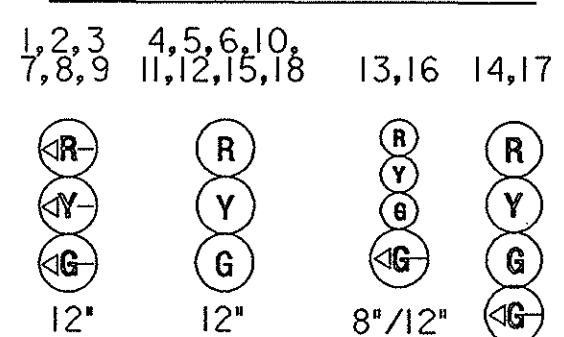


US 301 ASSUMED TO RUN  
IN A NORTH-SOUTH DIRECTION

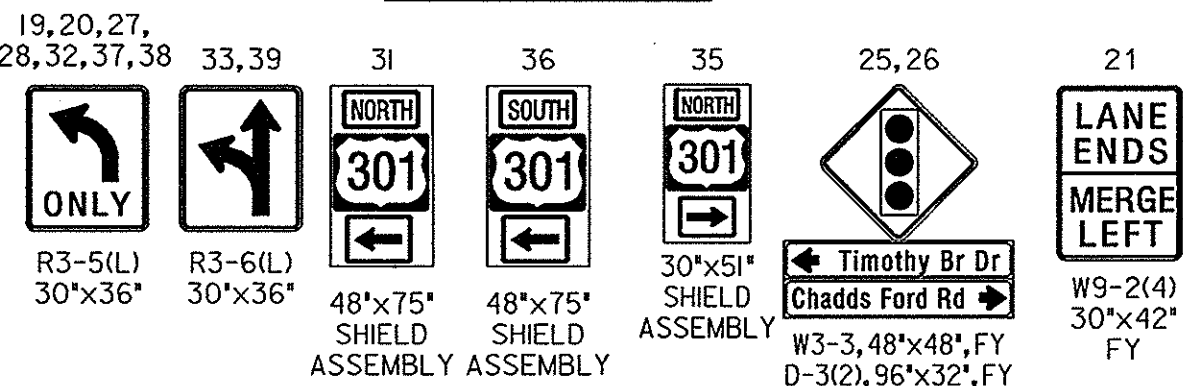
PROPOSED  
VIDEO DETECTION  
b, d

EXISTING VIDEO  
DETECTION  
TO BE RELOCATED  
a, c

#### PROPOSED LED SIGNALS



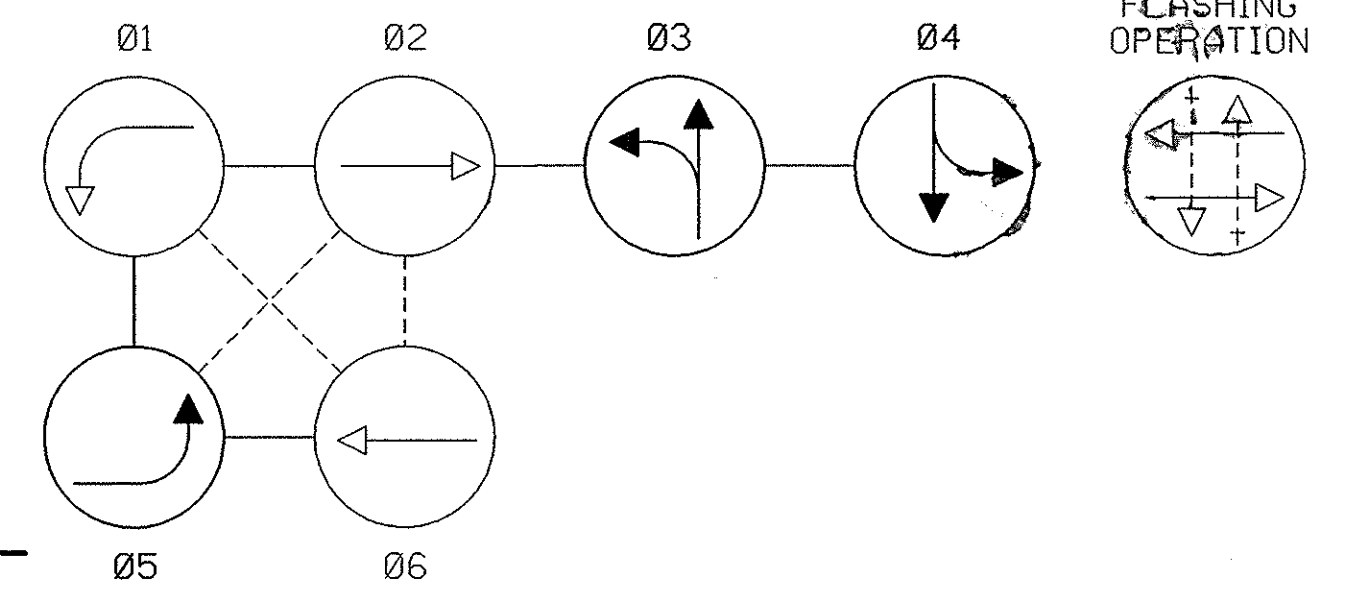
#### PROPOSED SIGNS



#### EXISTING SIGNS TO REMOVE

#### EXISTING SIGNS TO REMAIN

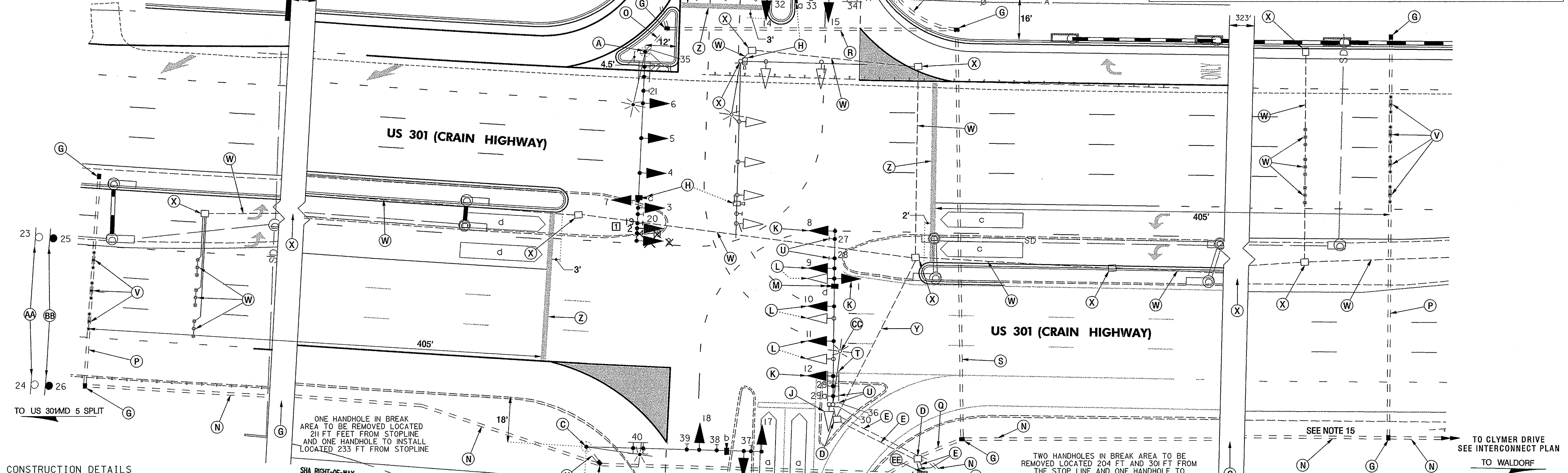
#### NEMA PHASING



NOTE:  
PHASES ASSOCIATED BY A DASHED LINE MAY/WILL OPERATE CONCURRENTLY.  
PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.  
PHASE 1 WILL LEAD AND PHASE 5 WILL LAG.

LINE HEIGHTS SOUTHEAST CORNER (LH)  
TELEPHONE 24'-11"  
TELEPHONE 23'-6"  
TELEPHONE 22'-0"  
TELEPHONE 21'-11"

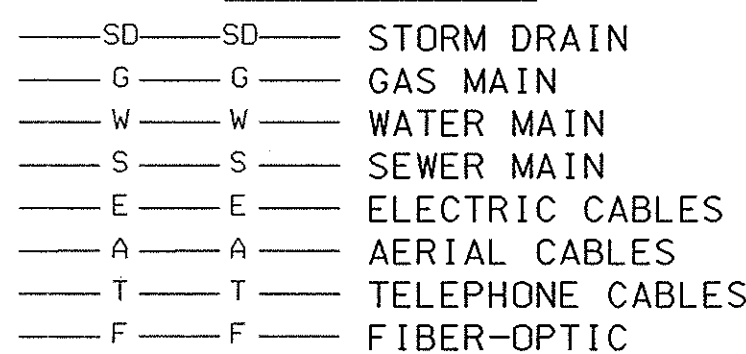
SPECIAL NOTE: VERIZON WILL BE  
RELOCATING THE EXISTING POLE LINE  
ON THE EAST SIDE OF US 301 APPROXIMATELY  
15 FEET EAST OF ITS EXISTING LOCATION.



#### CONSTRUCTION DETAILS

- INSTALL SPECIAL 27 FT. STEEL POLE WITH A 75-FT. MAST ARM, FOUNDATION, TRAFFIC SIGNAL HEADS, RELOCATED VIDEO DETECTION CAMERA (INSTALL NEW CONTROL CABLE), SIGNS, AND 20 FT. LIGHTING ARM WITH 250 WATT HPS LUMINAIRE. (NOTE: 1-3 IN. PVC 90 DEGREE BEND)
- INSTALL 27 FT. STEEL POLE WITH A 60 FT. MAST ARM, FOUNDATION, TRAFFIC SIGNAL HEADS, RELOCATED VIDEO DETECTION CAMERA (INSTALL NEW CONTROL CABLE), SIGNS, AND 20 FT. LIGHTING ARM WITH 250 WATT HPS LUMINAIRE. (NOTE: 1-3 IN. PVC 90 DEGREE BEND)
- INSTALL 27 FT. STEEL POLE WITH A 70 FT. MAST ARM, FOUNDATION, TRAFFIC SIGNAL HEADS, VIDEO DETECTION CAMERA, SIGNS, AND 20 FT. LIGHTING ARM WITH 250 WATT HPS LUMINAIRE. (NOTE: 1-3 IN. PVC 90 DEGREE BEND)
- USE EXISTING ELECTRICAL HANDHOLE
- USE EXISTING ELECTRICAL CONDUIT
- USE EXISTING TRAFFIC SIGNAL CABINET
- INSTALL ELECTRICAL HANDHOLE
- RELOCATE EXISTING VIDEO DETECTION CAMERA
- REMOVE EXISTING TRAFFIC SIGNAL HEAD
- INSTALL NEW TRAFFIC SIGNAL HEAD
- INSTALL NEW TRAFFIC SIGNAL HEAD/REMOVE EXISTING TRAFFIC SIGNAL HEAD
- INSTALL VIDEO DETECTION CAMERA (INSTALL CONTROL CABLE)
- INSTALL 3 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED)
- INSTALL 3 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED PRIOR TO ROAD CONSTRUCTION)
- INSTALL 3 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (BORED)
- INSTALL 4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED)
- INSTALL 4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED PRIOR TO ROAD CONSTRUCTION)
- INSTALL 4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (BORED)
- REMOVE EXISTING OVERHEAD SIGN
- INSTALL OVERHEAD SIGN
- INSTALL NON-INVASIVE MICROLOOP PROBE (SET OF THREE OR FOUR)
- EXISTING EQUIPMENT TO BE REMOVED AS PART OF THE ROADWAY EXCAVATION OR ABANDONED
- REMOVE AND DISPOSE OF EXISTING TRAFFIC SIGNAL EQUIPMENT. NOTE: REMOVE ALL FOUNDATIONS 12 INCHES BELOW GRADE.
- ABANDON EXISTING CONDUIT (CAP AT THE NEAREST HANDHOLE)
- INSTALL 24 INCH WHITE THERMOPLASTIC PAVEMENT MARKINGS (FOR STOPLINE)

#### UTILITY LEGEND



#### CONSTRUCTION DETAILS (CONT.)

- REMOVE EXISTING GROUND MOUNTED SIGNS AND SUPPORTS
- INSTALL GROUND MOUNTED SIGN ON TWO 4 IN. X 6 IN. WOOD POSTS
- INSTALL 2 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED) - FOR PROPOSED TELEPHONE SERVICE. CAP AND MARK CONDUIT, AND LEAVE A 1 FT. STUB WITH PULL STRING AT UTILITY POLE FOR USE BY OTHERS.
- INSTALL METERED SERVICE PEDIESTAL (NOTE: 1-2 IN. 1-3 IN. AND 1-4 IN. PVC 90 DEGREE BENDS)
- REMOVE EXISTING ELECTRICAL SERVICE EQUIPMENT FROM EXISTING CABINET/CAP KNOCKOUT.
- INSTALL 2 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED). USE EXISTING 2 IN. PVC 90 DEGREE BEND IN CABINET BASE.
- INSTALL 4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED) - FOR UNDERGROUND POWER SERVICE. THE CONTRACTOR SHALL CAP, MARK, AND LEAVE A ONE FOOT STUB WITH PULL STRING AT BASE OF UTILITY POLE FOR USE BY OTHERS.
- REWIRE EXISTING STREET LIGHT (SEE WIRING DIAGRAM)

APPROVAL: *[Signature]*  
REDLINE REVISION NO. 1  
04-21-2008

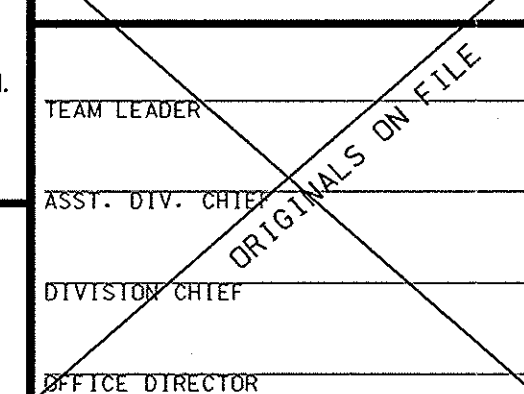
#### GEOMETRIC LEGEND



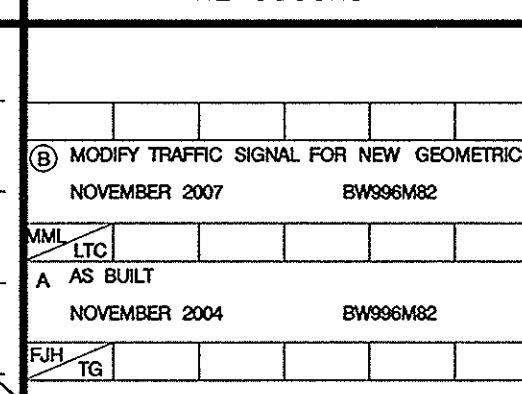
#### GENERAL NOTES

- THE CONTRACTOR SHALL CONTACT MISS UTILITY TO VERIFY ALL UNDERGROUND UTILITIES PRIOR TO THE INSTALLATION OF PROPOSED SIGNAL EQUIPMENT.
- IF ANY UTILITY CONFLICTS ARISE THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER.
- MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING MSHA STANDARD PLATES FOR TRAFFIC CONTROL.
- SEE TRAFFIC CONTROL PLAN FOR DETAILS ON MAINTENANCE OF TRAFFIC.
- THE SHA SIGNAL SHOP WILL BE RESPONSIBLE FOR ALL INTERNAL CABINET WIRING.
- VIDEO CAMERA LOCATION/ALIGNING SHALL BE COORDINATED WITH THE SHA ENGINEER.
- SEE DETAIL THIS SHEET FOR SIGNAL HEAD, VIDEO DETECTION CAMERA, AND SIGN LAYOUT.
- WITHIN 36 IN. OF UNDERGROUND UTILITY LOCATIONS, THE CONTRACTOR SHALL BE REQUIRED TO EXCAVATE FOR FOUNDATION AND CONDUIT BY HAND.
- ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH MSHA STANDARDS.
- THE CONTRACTOR SHALL VERIFY THE PROPOSED POLE LOCATIONS PRIOR TO INSTALLATION.
- ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS, HIGHEST ROADWAY PROFILE FOR OPEN SECTIONS, TO MEET CLEARANCES AS SPECIFIED IN MD 816.03, MD 818.01, MD 818.02 AND MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
- THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL ABANDONED WIRING.
- THE CONTRACTOR SHALL ENSURE THE EXISTING TRAFFIC SIGNAL REMAINS OPERATIONAL UNTIL THE MODIFIED TRAFFIC SIGNAL IS OPERATIONAL.
- THE CONTRACTOR SHALL CONTACT MR. ED RODENHIZER 72 HOURS IN ADVANCE OF SIGNAL CONSTRUCTION.
- THE CONTRACTOR SHALL BORE PORTION OF 3 INCH CONDUIT UNDER STORM DRAIN STRUCTURES ON THE WEST SIDE OF US 301.

#### APPROVALS



#### REVISIONS



STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION

US 301 (CRAIN HIGHWAY) AT  
CHADDS FORD ROAD/TIMOTHY BRANCH DRIVE

#### TRAFFIC SIGNALIZATION PLAN

SCALE 1" = 20' DATE MAY 13, 2003 CONTRACT NO. BW996MW82  
DESIGNED BY FRANK HOECKEL COUNTY PRINCE GEORGES  
DRAWN BY FRANK HOECKEL LOGMILE 16030101.25  
CHECKED BY JEFF HEINKE T.I.M.S. NO. I-666  
F.A.P. NO. N/A TOD NO.  
DRAWING NO. TS-4238-B OF SHEET NO. OF

LENHART TRAFFIC CONSULTING  
TRAFFIC ENGINEERING & TRANSPORTATION PLANNING

331 Redwood Grove Court Millersville, Maryland 21108  
Tel: (410) 987-3888 Fax: (443) 782-2288